

What is claimed is:

*Sub A4 5*

1. A thin-film magnetic head comprising:  
a medium facing surface that faces toward a recording medium;  
a read head including: a magnetoresistive element; and a first shield  
layer and a second shield layer for shielding the magnetoresistive element,  
the first and second shield layers having portions that are located in regions  
on a side of the medium facing surface and opposed to each other, the  
magnetoresistive element being placed between the portions of the shield  
layers; and

10 a write head including: a first magnetic layer and a second magnetic  
layer that are magnetically coupled to each other and include magnetic pole  
portions opposed to each other and placed in regions on a side of the medium  
facing surface, each of the magnetic layers including at least one layer; a gap  
layer provided between the pole portions of the first and second magnetic  
15 layers; and a thin-film coil at least part of which is placed between the first  
and second magnetic layers, the at least part of the coil being insulated from  
the first and second magnetic layers, wherein  
the read head and the write head are placed such that one of the shield  
layers of the read head and one of the magnetic layers of the write head are  
20 opposed to each other; the thin-film magnetic head further comprising  
a magnetism intercepting layer for intercepting magnetism provided  
between the one of the shield layers and the one of the magnetic layers, and  
made of a nonmagnetic metal material that is capable of being formed  
through plating.

25

2. The thin-film magnetic head according to claim 1 wherein the

nonmagnetic metal material has a Vickers hardness of 400 or greater.

3. The thin-film magnetic head according to claim 1 wherein the nonmagnetic metal material is made of a single element that is not used for 5 the one of the shield layers and the one of the magnetic layers.

4. The thin-film magnetic head according to claim 1 wherein the nonmagnetic metal material is platinum.

10 5. The thin-film magnetic head according to claim 1 wherein the magnetism intercepting layer has a thickness of 0.05  $\mu\text{m}$  or greater.

15 6. A method of manufacturing a thin-film magnetic head comprising: a medium facing surface that faces toward a recording medium; a read head including: a magnetoresistive element; and a first shield layer and a second shield layer for shielding the magnetoresistive element, the first and second shield layers having portions that are located in regions on a side of the medium facing surface and opposed to each other, the magnetoresistive element being placed between the portions of the shield 20 layers; and

a write head including: a first magnetic layer and a second magnetic layer that are magnetically coupled to each other and include magnetic pole portions opposed to each other and placed in regions on a side of the medium facing surface, each of the magnetic layers including at least one layer; a gap 25 layer provided between the pole portions of the first and second magnetic layers; and a thin-film coil at least part of which is placed between the first

and second magnetic layers, the at least part of the coil being insulated from the first and second magnetic layers; wherein

the read head and the write head are placed such that one of the shield layers of the read head and one of the magnetic layers of the write head are opposed to each other; the thin-film magnetic head further comprising

5 a magnetism intercepting layer for intercepting magnetism provided between the one of the shield layers and the one of the magnetic layers; the method including the steps of:

10 forming one of the read head and the write head;

forming the magnetism intercepting layer through plating, the magnetism intercepting layer being made of a nonmagnetic metal material that is capable of being formed through plating; and

15 forming the other one of the read head and the write head.

15 7. The method according to claim 6 wherein the nonmagnetic metal material has a Vickers hardness of 400 or greater.

8. The method according to claim 6 wherein the nonmagnetic metal material is made of a single element that is not used for the one of the shield 20 layers and the one of the magnetic layers.

9. The method according to claim 6 wherein the nonmagnetic metal material is platinum.

25 10. The method according to claim 6 wherein the magnetism intercepting layer has a thickness of 0.05  $\mu\text{m}$  or greater.

11. The method according to claim 6 wherein the one of the shield layers, the magnetism intercepting layer and the one of the magnetic layers are consecutively formed through plating.